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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,399	02/18/2004	Miska Hannuksela	915-005.066-1	4342

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EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT	PAPER NUMBER
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2482

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/782,399	Applicant(s) HANNUKSELA, MISKA	
	Examiner CHIKAODILI E. ANYIKIRE	Art Unit 2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is responsive to application number (10782399) filed on February 18, 2004. Claims 1-13 and 15-36 are pending and have been examined.

Response to Arguments

2. Applicant's arguments, see Remarks, filed March 11, 2011, with respect to claim 1 have been fully considered and are persuasive. The Non-Final Office Action of September 21, 2010 has been withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 4-6, and 9-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Hannuksela (US 2002/0105951) in view of Yasuda et al (US 6,754,275, hereafter Yasuda).

As per **claim 1**, as best understood by the Examiner, Hannuksela disclose a method comprising:

receiving media data (paragraph [0021] lines 1-5), and

buffering the media data in a buffer to construct a packet stream (paragraphs [0023] – [0035]),

the media data being included in data transmission units (paragraphs [0025]; this section discloses the data being buffered in packets (i.e. data transmission units)),

the data transmission units ordered in a transmission order which is at least partly different from a decoding order of the media data in the data transmission units.

However, Hannuksela does not explicitly teach wherein a parameter is defined indicative of the maximum number of data transmission units which have an earlier transmission order and a later decoding order than another data transmission unit in a packet stream; providing said parameter to a decoder to determine buffering requirements.

In the same field of endeavor, Yasuda teaches wherein a parameter is defined indicative of the maximum number of data transmission units which have an earlier transmission order and a later decoding order than another data transmission unit in a

packet stream; providing said parameter to a decoder to determine buffering requirements (column 8 lines 51-67; Yasuda teaches the FC parameter indicating the number of frames to be outputted).

Therefore, it would have been for one of ordinary skill in the art at the time of the invention to modify the invention of Hannuksela in view of Yasuda. The advantage would be an increase in efficiency of the buffering of the transmitted data.

Regarding **claim 4**, arguments analogous to those presented for claim 1 are applicable to claim 4.

As per **claim 4**, Hannuksela discloses a method for decoding encoded picture stream in a decoder, wherein the encoded picture stream is received as data transmission units comprising media data, buffering of transmission units is performed (paragraphs [0023]-[0035]).

Regarding **claim 5**, arguments analogous to those presented for claim 1 are applicable to claim 5.

As per **claim 5**, Hannuksela further discloses a system comprising an encoder for encoding pictures (paragraph [0037]).

As per **claim 6**, Hannuksela disclose the system according to claim 5, further comprising a decoder for decoding encoded pictures, and a memory module for buffering decoded pictures, wherein said parameter is arranged to be used for

determining a required amount of memory places to be reserved from the memory for buffering decoded pictures (paragraphs [0040]-[0042]).

Regarding **claim 9**, arguments analogous to those presented for claim 1 are applicable to claim 9.

As per **claim 9**, Hannuksela further discloses a transmitting device, responsive to the encoded media stream, for transmitting the media stream in said data transmission units over a transmission medium or to a storage medium(paragraphs [0037]-[0038]).

Regarding **claim 10**, further arguments analogous to those presented for claims 1 and 2 are applicable to claim 10.

As per **claim 10**, Hannuksela disclose a receiving device for receiving encoded picture stream as transmission units (paragraph [0038]).

As per **claim 11**, Hannuksela disclose the receiving device according to claim 10, further comprising a memory module, and a definer for examining said parameter and for reserving memory places for buffering from said memory according to said parameter (paragraph [0038]).

As per **claim 12**, Hannuksela discloses the receiving device according to claim 11, further comprising a decoder for decoding pictures from the received encoded picture stream, wherein the receiving device is configured for using the reserved memory places for buffering the encoded pictures (paragraphs [0040]-[0042]).

Regarding **claim 13**, arguments analogous to those presented for claim 1 are applicable to claim 13.

As per **claim 13**, Hannuksela further disclose a computer program product comprising machine executable steps for buffering encoded pictures ([0021]; section discloses the decoding process which would include buffering as software).

Regarding **claim 15**, arguments analogous to those presented for claims 1 and 10 are applicable to claim 15.

Regarding **claim 16**, arguments analogous to those presented for claim 1 are applicable for claim 16.

Regarding **claim 17**, arguments analogous to those presented for claim 1 are applicable to claim 17.

Regarding **claim 18**, arguments analogous to those presented for claim 16 are applicable to claim 18.

As per **claim 19**, Hannuksela et al disclose the method according to claim 1, wherein said media data comprises at least one of the following:

video data and audio data (paragraph [0037]).

Regarding **claim 20**, arguments analogous to those presented for claim 11 are applicable for claim 20.

Regarding **claim 21**, arguments analogous to those presented for claim 12 are applicable for claim 21.

Regarding **claim 24**, arguments analogous to those presented for claims 4 and 13 are applicable for claim 24.

Regarding **claim 25**, arguments analogous to those presented for claim 1 are applicable for claim 25.

Regarding **claim 31**, arguments analogous to those presented for claim 5 are applicable for claim 31.

Regarding **claim 34**, arguments analogous to those presented for claim 4 are applicable for claim 34.

Regarding **claim 35**, arguments analogous to those presented for claim 6 are applicable for claim 35.

Regarding **claim 36**, arguments analogous to those presented for claim 6 are applicable for claim 36.

6. Claims 2-3, 7-8, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannuksela et al (US 2002/0105951) in view of Yasuda et al (US 6,754,275, hereafter Yasuda) in further view of Viscito et al (US 2004/0005007).

As per **claim 2**, the modified invention of Hannuksela et al disclose the method according to claim 1.

However, the modified invention of Hannuksela et al does not explicitly disclose wherein said multimedia data comprises a slice of an encoded picture.

In the same field of endeavor, Viscito et al discloses wherein said multimedia data comprises a slice of an encoded (Fig 2A, [0034]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hannuksela et al in accordance with the teachings of Viscito et al because it will perform buffering of the multimedia information in compliance with a methodology that is conventionally implemented in multimedia transmission and receiving.

As per **claim 3**, Hannuksela et al disclose the method according to claim 1.

However, the modified invention of Hannuksela et al does not explicitly disclose wherein said transmission unit comprising multimedia data is a VCL NAL unit.

In the same field of endeavor, Viscito et al discloses wherein said transmission unit comprising multimedia data is a VCL NAL unit (Fig 2B, [0034]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hannuksela et al in accordance with the teachings of Viscito et al because it will perform buffering of the multimedia information in compliance with a methodology that is conventionally implemented in multimedia transmission and receiving.

Regarding **claim 7**, arguments analogous to those presented for claim 2 are applicable to claim 7.

Regarding **claim 8**, arguments analogous to those presented for claim 3 are applicable to claim 8.

Regarding **claim 22**, arguments analogous to those presented for claim 2 are applicable for claim 22.

Regarding **claim 23**, arguments analogous to those presented for claim 3 are applicable for claim 23.

Regarding **claim 26**, arguments analogous to those presented for claim 2 are applicable for claim 26.

Regarding **claim 27**, arguments analogous to those presented for claim 3 are applicable for claim 27.

As per **claim 28**, arguments analogous to those presented for claims 1 and 2 are applicable for claim 28.

Regarding **claim 29**, arguments analogous to those presented for claim 6 are applicable for claim 29.

Regarding **claim 30**, arguments analogous to those presented for claim 12 are applicable for claim 30.

Regarding **claim 32**, arguments analogous to those presented for claim 2 are applicable for claim 32.

Regarding **claim 33**, arguments analogous to those presented for claim 3 are applicable for claim 33.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili Anyikire whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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